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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,988	10/10/2000	Alan G. Jack	003300-688	2765

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EXAMINER

GONZALEZ, JULIO C

ART UNIT PAPER NUMBER

2834

DATE MAILED: 03/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/684,988

Applicant(s)

JACK ET AL.

Examiner

Julio C. Gonzalez

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 1/08/02 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

? 1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electrical supplies of every tooth of the stator sections been shifted 180 degrees electrical relative to "electrical supplies of every tooth" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

✓ 2. The drawings are objected to because the drawings fail to show clearly the scope of the invention. The tip of the teeth been "axially" extending and both of the stator sections been shifted by 180 degrees is not clearly shown. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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✓ 4. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant discloses in claim 1 that each section would receive electricity from an electrical supply. What are these "electrical supplies"? Can these "electrical supplies" be shown in the drawings?

About the stator sections been shifted 180 degrees electrical relative, how is relative is relative? Are the stator sections not been shifted 180 degrees all the time? Does the shifting degree changes? What is meant by "electrical relative"? Is it an electrical angle?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 9-12, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson, Jr. in view of Suzuki et al.

Henderson discloses a stator having two stator sections 2, 10 having the same amount of teeth and the teeth having windings (see figure 2A). Also, the stator sections are mutually phase shifted (see figure 1A). However, Henderson does not disclose that the stator sections are shifted by 180 degrees.

On the other hand, Suzuki et al discloses for the purpose of restraining effectively unwanted vibration that the stator sections 5a, 5b are phase shifted by 180 degrees (see figures 2, 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design an electrical machine as disclosed by Henderson and to modify the invention by shifting the stator sections by 180 degrees for the purpose of restraining effectively unwanted vibration as disclosed by Suzuki et al.

7. Claims 4 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson and Suzuki as applied to claims 1-3 and 14 above, and further in view of Taguchi.

The combined electrical machine includes all of the elements above. However, the combined electrical machine does not disclose the use of magnetic powder.

On the other hand, Taguchi discloses for the purpose to reduce the magnetic reluctance of a magnetic path between the stator and rotor that the stator 4 is made of magnetic powder (see constitution).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined electrical machine and to use magnetic powder for the purpose to reduce the magnetic reluctance of a magnetic path between the stator and rotor as disclosed by Taguchi.

8. Claims 8, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson and Suzuki as applied to claims 1-3 above, and further in view of Uchida et al.

The combined electrical machine includes all of the elements above. However, the combined electrical machine does not disclose that the tips of the teeth extend axially.

On the other hand, Uchida discloses for the purpose of securing effectively the insulation between the windings and the core that the tips of the teeth extend axially (see figures 2, 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined electrical machine and to extend the teeth axially for the purpose of securing effectively the insulation between the windings and the core as disclosed by Uchida.

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9. Claims 5-7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson, Suzuki and Taguchi as applied to claim 4 above, and further in view of Nishiyama et al.

The combined electrical machine includes all of the elements above. However, the combined electrical machine does not disclose that the stator sections are made of separated units.

On the other hand, Nishiyama et al discloses for the purpose of reducing cogging in a motor that the stator is made up of separated units (see figures 1, 2 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined electrical machine and to have an stator been made up of separated units for the purpose of reducing cogging in a motor as disclosed by Nishiyama et al.

### ***Response to Arguments***


10. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-77227722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

Jcg

March 20, 2002